MACSEAL BDM

HOT-APPLIED RUBBERIZED ASPHALT WATERPROOFING/ROOFING MEMBRANE

PRODUCT DESCRIPTION

MACSEAL BDM is a hot-applied, flexible, polymer-modified asphalt waterproofing/roofing membrane. It is composed of a unique blend of engineered asphalts, virgin polymers, synthetic rubbers, and reinforcing mineral fillers.

MACSEAL BDM has excellent adhesive and cohesive properties which combine to eliminate the lateral movement of water between the membrane and the substrate.

MACSEAL BDM forms a seamless and monolithic waterproofing membrane, impermeable to moisture penetration and remaining flexible over a wide range of temperatures.

GENERAL PRODUCT FEATURES

- Easily applied over a wide range of temperatures with either a squeegee or a handheld wand equipped with an appropriate applicator tip
- Monolithic and seamless membranes are more reliable and impermeable than traditional “peel and stick” or “torch-on” membranes.
- Able to be placed at ambient temperatures as low as -18°C (0°F), significantly extending the construction season
- Can be applied in either a single-ply, double-ply, or fibreglass-reinforced layer for enhanced performance and resistance to traffic and high shear stress
- Must be heated in oil jacketed double boiler kettle

CERTIFICATION OF QUALITY

McAsphalt Industries Limited is accredited to the quality management standard ISO 9001, the environmental management standard ISO 14001, and the occupational health and safety standard ISO 45001.

Each lot of MACSEAL BDM is produced using the strictest quality, safety, and environmental guidelines. Each production lot is tested to ensure it meets or exceeds all performance requirements and is delivered with a Certificate of Analysis.

SPECIFICATIONS AND TYPICAL RESULTS

<table>
<thead>
<tr>
<th>TEST</th>
<th>TYPICAL DATA</th>
<th>SPEC.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point (COC), ºC</td>
<td>275</td>
<td>-</td>
</tr>
<tr>
<td>Cone Penetration, 25°C, dmm</td>
<td>53</td>
<td>110</td>
</tr>
<tr>
<td>Cone Penetration, 50°C, dmm</td>
<td>114</td>
<td>160</td>
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<tr>
<td>Flow, 60°C, mm</td>
<td>0</td>
<td>3</td>
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<tr>
<td>Softening Point (R&amp;B), ºC</td>
<td>91</td>
<td>-</td>
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<tr>
<td>Toughness, J</td>
<td>17.5</td>
<td>5.5</td>
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<tr>
<td>Toughness/Peak Load Ratio</td>
<td>0.065</td>
<td>0.04</td>
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<tr>
<td>H₂O Vapour Perm., ng/Pa.s.m²</td>
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<td>1.7</td>
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<tr>
<td>Water Absorption, 96 h, %</td>
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<tr>
<td>Low Temp Crack Bridging, -25°C</td>
<td>Pass</td>
<td>-</td>
</tr>
<tr>
<td>Heat Stability, 5 hours</td>
<td>Pass</td>
<td>-</td>
</tr>
</tbody>
</table>

TEMPERATURE VISCOSITY CHART

![Temperature Viscosity Chart](chart.png)
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RECOMMENDED USE

MACSEAL BDM is designed to protect structures from costly damage caused by water infiltration.

TYPICAL APPLICATIONS

• Waterproofing concrete slab construction on highway bridge decks, parking garages, roof terraces, plaza decks, pedestrian concourses, and podiums
• Single course construction such as tunnels, reservoirs, planters, foundation walls, and reflective pools utilizing two course construction
• Protected, inverted membrane roofing systems
• Interlayer between concrete substrate and asphaltic concrete overlays on vehicular travelled ramps or bridge decks with excessive grades or super elevations <5%. MCA Technical Services should be consulted regarding grades in excess of 15%.

APPLICATION GUIDELINES

MCA Marketing should be consulted for detailed specifications on membrane application. Otherwise, please consult specification CAN/CGSB-37.50-M89.

APPLICATION TEMPERATURES

Recommended pouring temperature: 185°C (365°F)
Maximum safe heating temperature: 200°C (392°F)

LIMITATIONS

• Do not apply over any type of lightweight or insulating concrete without written approval
• Not for exposed application. Not for application in totally enclosed areas with no ventilation.
• Melt only in an oil-jacketed double boiler kettle that is mechanically agitated
• When paving on bridge decks waterproofed with MACSEAL BDM, usage of heavy construction equipment such as MTVs or heavy-duty rollers should be discussed with the engineer or with MCA Technical Services.

PACKAGING, STORAGE AND HANDLING

MACSEAL BDM is available in the following packaging:
• 2 x 11 kg (25 lb) polybags in a high-strength, corrugated cardboard container. MACSEAL BDM in boxes should be kept in a dry environment.

PRODUCT SUPPORT

With the MCA Advantage, you get a partner and advisor who will consult with you about designs, specifications, technical services, processes, and material selection. By developing innovative, custom-designed products that offer additional benefits such as peak performance in unique conditions, improved field performance, and greater environmental and health benefits, the MCA Advantage provides significant long-term cost savings, resulting in lower total cost of ownership.